

## ABSTRACT OF THE DISCLOSURE

Filter devices, suitable for rendering pathogenic microorganisms non-viable and capable of regeneration to serve as filter devices for applications such as diesel engines where combustible particulates are trapped, include at least one porous filter element which is capable of electrically resistive heating to a  
5 temperature such that pathogens are rendered non-viable, and/or to a regeneration temperature such that combustible particulates are destroyed.